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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,728	02/28/2002	Evan D.H. Green	NUFO021CON	7513

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EXAMINER

JACKSON, CORNELIUS H

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,728

Applicant(s)

GREEN ET AL.

Examiner

Cornelius H. Jackson

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 33-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.



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TECHNOLOGY CENTER 2800

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgment

1. Acknowledgment is made that applicant's Amendment, filed on 30 June 2003, has been entered. Upon entrance of the Amendment, claims 1, 6, 8-10, 14, 16, 20, 21, 27 and 28 were amended, claims 29-32 were cancelled and claims 33-36. Claims 1-28 and 33-36 are pending in the current application.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-9, 11, 12, 14-16, 22-24, 26-28 and 33-36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yasuda et al. (4947398). Yasuda et al. disclose a tunable filter **Fig. 4** comprising a grid generator **4** having reflective surfaces, mounted for optical alignment in an optical path of a beam, and the grid generator **4** of a first selected optical path length determinative of a first free spectral range corresponding to a spacing between adjacent gridlines of the selected wavelength grid; a channel selector **5** having reflective surfaces, mounted for optical alignment in the optical path of the beam, and the channel selector **5** with a tunable second optical path length determinative of a second free spectral range, a difference between the first free spectral range and the second free spectral range being inversely proportional to the number of channels of the selected wavelength grid and said second optical path length tunable to a selected one of the number of channels of the wavelength grid, **see Figs. 3a-c and 5, col. 4, lines 10-60 and col. 10, line 45-col. 12, line 34**; means **11** for maintaining the first optical path length of the grid generator **4**; and means **12** for varying the tunable second optical path length of the channel selector **5** to tune the

Art Unit: 2828

optical beam to a selected channel of the wavelength grid and attenuate the other channels of the wavelength grid, **see abstract, col. 9, line 43-col. 13, line 20.**

Regarding claims 2 and 3, Yasuda et al. disclose all the stated limitations, **see col. 2, line 40- col. 4, line 60.**

Regarding claims 4-9, 11, 12 and 14-16, Yasuda disclose the grid generator **4** is an interference element/etalon wherein the means for maintaining the first optical path length of the grid generator comprises a thermal controller and the channel selector **5** is an interference element and comprises a thermal/mechanical actuator to tune the channel selector by varying the temperature of the channel selector and all the other stated limitations, **see col. 4, line 48-col. 11, line 40 and col. 18, line 23-col. 19, line 11.**

Regarding claims 22-24 and 26-28, Yasuda disclose a logic **13**, an error detector **9/10** and a gain medium **1** with front and rear facets **2,3** and all the other stated limitations, **see Fig. 4, abstract, col. 9, line 43-col. 13, line 20 and col. 13, line 23-col. 20, line 6.**

Regarding claims 33-36, the method of forming a device is not germane to the issue of patentability of the device itself. Therefore, the rejection used against the device, stands for the method as well, **see also, col. 13, line 23-col. 20, line 6.**

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10, 13, 17-21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuda et al. (4947398). Yasuda et al., as applied to claims 1-9, 11, 12, 14-16, 22-24, 26-28 and 33-36 above, teach all the stated limitations except for the type of etalon/birefringement element used or the use of optical circulators.

Regarding claims 10, 13 and 17-21, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 25, it would have been an obvious matter of design choice to use optical circulators as a coupling medium, since applicant has not disclosed that the use of optical circulators solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with optical fiber.

Response to Arguments

7. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Note that claims 1-28 and 33-36 of this application conflict with claims 1-17, 19-34 and 35-54 of Application No. 10/099649 and claims 88, 89, 91, 92, 97-99 and 101-125 of Application No. 09/626526. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822. Also see *Zorabedian et al.* (6282215).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2828

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (703) 306-5981. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



chj
July 22, 2003



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